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## ABSTRACT

METHOD OF SEPARATION OF PALLADIUM ISOTOPES IN  
ELECTROMAGNETIC SEPARATOR USING A SOURCE OF IONS

5       The invention relates to the technology of  
electromagnetic separation of palladium isotopes.

      The method provides placement of a working substance  
comprised by metal palladium in a combined with gas-  
discharge chamber crucible of a source of ions, heating of  
10   the working substance up to the vapor state, ionization of  
the vapors of the working substance in the gas-discharge  
chamber of the source under action of electron emission  
from a hot cathode, forming ionic beam by electrodes of  
ion-optical system, separation and focusing the ionic beams  
15   of isotopes in magnetic field, entrapping the ions by  
receiving boxes, thus temperature of the crucible heating  
and the gas-discharge chamber being maintained within 1500-  
1700°C.

      The method being effectively used for industrial  
20   electromagnetic palladium isotope separation and for  
obtaining isotopes: Pd-102, Pd-104, Pd-105, Pd-106, Pd-108  
b Pd-110 with higher enrichment degree.